FINDING OF NO SIGNIFICANT IMPACT SAELTZER DAM FISH PASSAGE AND FLOW PROTECTION PROJECT

Lead Agency:

U.S. Bureau of Reclamation
Northern California Area Office
16349 Shasta Dam Boulevard
Shasta Lake City, CA 96019-8400

The U.S. Bureau of Reclamation (Reclamation) and the California Department of Fish and Game (CDFG) are proposing to remove Saeltzer Dam, eliminate the water diversion to the Townsend Flat Water Ditch (Townsend Ditch) at Saeltzer Dam, and exchange 6,000 acre-feet of water from the Townsend Flat Water Ditch Company's (TFWDC) point of diversion at Saeltzer Dam to Central Valley Project (CVP) facilities and service areas within Shasta County. Removing Saeltzer Dam would benefit threatened and endangered anadromous salmonids by providing unimpeded access to the coldest 10 miles of stream habitat and improving sediment transport through the lower reaches of Clear Creek. This action would compliment other restoration projects in the watershed that benefit anadromous salmonids and other species.

ALTERNATIVES

Saeltzer Dam has been identified as a major impediment to fish migration since at least the 1950s when the CDFG installed a fish ladder along the right bank. Since then, the effect of Saeltzer Dam on salmonids has been regularly documented, culminating in the dam's inclusion in CVPIA (b)(12) authorizing language. The DWR identified ten (10) potential alternatives for consideration in a 1986 study. These alternatives included a broad range of options, which, after further consideration, were reduced to the following three alternatives:

1. Replace the existing dam with a low-head diversion dam upstream to convey water to the Townsend Ditch. A new fishway and fish screen would also be constructed at the new dam.

2. Remove the existing dam and construct a new dam at the same location with a fishway through the new dam.

3. Construct a new fishway around the south side of the existing dam.

Costs for these alternatives were considered excessive in comparison to the relative benefits provided. Therefore, these alternatives have not been carried forward because they are not considered feasible, either in terms of economic, institutional, or biological viability. Alternatives 1 and 2 attempted to address delivery of water to TFWDC, but failed to do so in an economical manner. Alternative 3 would maintain water deliveries, but was determined to provide inadequate assurance that fish passage would occur. The proposed project is the only identified project that TFWDC would agree to without reconstructing a ladder on the existing dam. The reconstruction of the ladder at the existing dam was not viewed as a prudent investment of funds because of the poor condition of the dam, the water rights holder's interest in other points of diversion, and the location of the dam at the

head of a gorge causing a compound fish passage problem. Therefore, the only alternative carried forward for full analysis in this EA/IS is the proposed project.

ANTICIPATED IMPACTS/BENEFITS

It is anticipated that implementing the proposed project would result in the following environmental effects:

- Anadromous salmonids would have access to an additional 10 miles of cool water habitat that is crucial to restoring threatened spring-run chinook salmon and steelhead trout.
- Instream flows would increase to the lower 6 miles of Clear Creek downstream once the current water diversion at Saeltzer Dam is eliminated, improving water temperatures and habitat conditions for anadromous salmonids.
- The existing fish passage impediment would be eliminated.
- Entrainment of juvenile salmonids in Townsend Ditch would be eliminated.
- Injury to adult fish trying to pass the dam would be eliminated.
- Short-term water turbidity and suspended sediment levels would exceed water quality objectives while constructing access roads, stream crossings and cofferdams, and removing the dam and excavating sediments behind the dam.
- Up to 0.02 acres of intermittent pool wetlands, 1.14 acres of riparian wetlands, and 0.78 acres of riverine waters would be temporarily disturbed during construction. However, these impacts would be temporary in nature, and the operation of the proposed project would offset the minor impacts incurred during dam removal.
- Elimination of a dam that has resulted in occasional fatalities and injuries to swimmers.
- Elimination of a structurally unsound facility that has the potential for catastrophic failure that would cause an uncontrolled release of sediments downstream.
- Upon implementation of the water exchange, as TFWDC ceases diversion from Clear Creek, individuals or businesses removing water from the Townsend Ditch without a permit, and users of groundwater dependent on the seepage water from the ditch and its legally irrigated areas would have to purchase water from Centerville Community Services District or the Anderson-Cottonwood Irrigation District, or would have to drill shallow wells and install home- or commercial-scale water treatment units. However, no water users operating under a permit from the Water Resources Control Board would be adversely impacted.

MEASURES TO AVOID ENVIRONMENTAL EFFECTS

Project design has been closely coordinated with the agencies responsible for the natural resources inherent within the proposed project area. Accordingly, the following specific actions would be undertaken during construction in an effort to avoid and minimize potential impacts to specific resources. Other measures incorporated into the proposed

project include timing construction to avoid and minimize potential impacts, maintaining creek flows during demolition by incorporating flow bypass structures, and using spawning gravel for access roads and stability buttresses within the project area.

Biological Resources

The project will have a beneficial effect on the Clear Creek anadromous fishery. Irrigated pasture will return to a more natural mesic state. Wildlife resources will not be affected by the project. The following measures have been incorporated into the project:

- Clearly identify elderberry shrub locations in the field to ensure avoidance if project-related activities occur within 100 feet of the shrubs.
- Survey for yellow-breasted chats and yellow warblers if construction activities would result in the loss of potential habitat prior to August 31st. If active nests are present, consult with CDFG and avoid construction activities within the immediate area until August 31st.

Hydrology and Water Quality

Hydrology in the creek will remain unchanged, except that diversions into Townsend Ditch will cease. Groundwater levels may drop as much as 6.5 feet, although actual drops are anticipated to be less. The drop in groundwater will not affect overlying land use. The following measures have been incorporated into the project:

- Equipment would not be operated in the stream channels of flowing live streams except as may be necessary to construct crossings and cofferdams necessary to implement the proposed project. All construction equipment would be cleaned prior to use on site.
- When work in a flowing stream is unavoidable, the entire streamflow would be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier and/or new channel would proceed in a manner that minimizes sediment discharges and facilitates both fish rescue operations and fish escape from the work area.
- Construction sites would be isolated from free-flowing waters of Clear Creek through construction of either cofferdams, sediment berms, or placement of filter fabric and/or native grass straw bales.
- Uncrushed cleaned gravels (½ inch to 5 inch), or other materials acceptable to National Marine Fisheries Service (NMFS) and CDFG, would be used to construct necessary stream crossings. Following construction, these gravels would be notched to provide a passageway and left instream to improve spawning habitat for anadromous salmonids.
- Monitoring of water turbidity and settleable materials would be conducted above and 200 feet downstream of the construction site a minimum of once every 8 hours during the work day. Should water turbidity levels be found to exceed (1) 20 percent of background or 1 Nephelometric Turbidity Unit (NTU) when background turbidity is between 0 and 50 NTU; (2) 10 NTU when background turbidity is between 50 and 100 NTU; or (3) 10 percent when background turbidity levels are greater than 100 NTU, except during working periods when these limits would be eased to allow for a turbidity

increase of 15 NTU and settleable materials exceed 0.1 milliliter per liter (ml/L), construction activities would cease until turbidity and settleable materials decrease to acceptable levels, or other actions as deemed appropriate by Central Valley Regional Water Quality Control Board (CVRWQCB) are implemented.

- An extensive sampling program indicates that mercury contamination does not reach hazardous levels. However, to ensure that mercury contamination does not result in significant impacts, monitoring and sampling efforts will continue throughout dam removal and dewatering of the reservoir pool, and disposition of the excavated sediment dewatering effluent will be consistent with applicable and relevant requirements.

- The release of fine sediment from the excavated reservoir pool to the stream will be controlled in a manner that attains the Basin Plan Objectives for avoiding detrimental sediment deposition in the stream. The control will be achieved via full excavation of the deepest sediment deposits in the vicinity of the dam, design, placement of a large pilot channel to guide the stream through the upper reservoir sediment deposits, placement of the gravel stability berm below the dam to impound residual sediment until a winter flow event occurs, and use of a flushing flow from Whiskeytown Reservoir in conjunction with the winter flow event during the release. Sediment monitoring will occur during the wintertime release.

- Complete revegetation and stabilization of disturbed soils. Seeding and mulching of disturbed areas with native grass species would be conducted prior to November 15 or immediately following completion of construction activities, using native species appropriate for this purpose.

- Sediment catchment basins or traps would be used to prevent sediment from being transported to sensitive aquatic habitats. The location and size of these basins would be designed to minimize impacts to riparian areas, wetland habitats, and stream channels. The types of sediment traps considered include filter berms and straw-bale barriers.

Utilities

The project will not affect utilities in the area. However, future deliveries of exchange water will be subject to separate environmental review. No measures are needed to avoid environmental effects.

Hazardous Materials

Hazardous materials used during dam removal are similar to other materials associated with standard construction practices. The following measures have been incorporated into the project:

- Implement construction Best Management Practices (BMPs) and develop Spill Prevention Control and Countermeasures (SPCC).

- Identify staging areas for fueling and maintaining heavy equipment.

- If oil or fuel spill occurs during construction or maintenance activities, immediately cease work, contact the CVRWQCB and CDFG if spill is above state and/or federal reporting requirements, and begin cleanup.

Geology and Soils

The project will not affect geology or soils in the area. No measures are needed to avoid environmental effects.

Mineral Resources

The project will not affect mineral resources in the area. No measures are needed to avoid environmental effects.

Air Quality

Air quality effects during construction are similar to those at typical construction sites of similar magnitude. The following measures have been incorporated into the project:

- When using internal combustion engines, turn off when not in use.
- Properly maintain equipment.
- Incorporate dust-suppression techniques: water unpaved access roads and construction staging areas at least twice a day during construction periods.

Land Use and Policies

No measures are needed to avoid environmental effects. Some changes may occur as a result of the project; however, current land use would likely continue following implementation of the project. In some cases, landowners may not opt to replace existing free water from the ditch with other sources; however, sources exist and are currently in use in other locations throughout the county.

Aesthetics

No measures are needed to avoid environmental effects to viewsheds. The appearance of portions of the landscape would change as the TFWDC ceases to divert water into the Townsend Ditch, but the rural character of the currently irrigated lands would not change. The fields would simply shift from an irrigated status to the unirrigated status typical of the foothills. Similarly, the water levels in the gravel pit ponds fed by leakage, seepage, and pasture runoff would drop, but the industrial quality of the landscape in this gravel mining area would remain unchanged.

Cultural Resources

No cultural resources were identified during site and database reviews of this project. However, the following measure has been incorporated into project design to ensure that no impacts occur:

- If ground-disturbing activities uncover prehistoric or archaeological resources, these activities would cease immediately, and Jim West, the Regional Archaeologist for the U.S. Bureau of Reclamation Mid-Pacific Region, would be contacted. Activities would not resume until appropriate measures have been developed.

Noise

Noise during dam removal will be similar to other construction projects of similar nature. No sensitive noise receptors exist near the site, and temporary construction noise would not be significant. No measures are needed to avoid environmental effects.

Recreation

No measures are needed to avoid environmental effects to public recreation. A private, recreation-based business will be economically affected by declining water levels following cessation of diversion by the TFWDC, as it might be forced to relocate temporarily or cancel scheduled events in the short term, purchase water, and seal the gravel berms that enclose its pond in the long term.

Environmental Justice

No measures are needed to avoid environmental justice impacts. Cessation of flows in the ditch would not affect current land use by minority or low-income populations or communities in the project area.

Indian Trust Assets

No Indian trust assets will be affected by the project.

MITIGATION

Because no significant impacts resulting from the project have been identified, no mitigation is required. The project has been designed in close coordination with resource agencies in order to avoid potential impacts to the environment. Economic impacts may result from TFWDC's decision to relocate its water right through exchange with Reclamation, as some users must purchase water and associated transport, treatment, and storage facilities to replace the supplies of free water for which they lack permits from the State Water Resources Control Board. However, provision was made in the agreement between TFWDC, Reclamation, and CDFG for TFWDC to address any legal claims based on injury to water rights resulting from dewatering of the Townsend Ditch.

DETERMINATION

On the basis of this evaluation:

a. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish and wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare and endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b. The project will not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.

c. The project will not have effects that are individually limited, but cumulatively considerable.

d. The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

e. No substantial evidence exists that the project will have a negative effect on the environment.

AGENCY COORDINATION

The following agencies have been involved in the coordination process or have provided input:

- Bureau of Land Management
- California Department of Fish and Game
- Central Valley Regional Water Quality Control Board
- National Marine Fisheries Service
- Natural Resources Conservation Service
- U.S. Fish and Wildlife Service
- Western Shasta Resource Conservation District

FINDING

Therefore, it is my determination that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment. This determination is based on analysis of environmental impacts using best available information through review of comments received on the Public Draft EA/IS, Endangered Species Act Section 7 Consultation, coordination concerning Indian Trust Assets and environmental justice implications, and the design of the project itself. The project is consistent with CVPIA. As such, an environmental impact statement is not required. An environmental assessment has been prepared in support of this finding and is available upon request at the Reclamation facility identified above.

Reference: Saeltzer Dam Fish Passage and Flow Protection Project

Michael Ryan, Area Manager
U.S. Bureau of Reclamation,
Northern California Area Office

August 7th 2000
Date

NEGATIVE DECLARATION FOR THE PROPOSED SAELTZER DAM FISH PASSAGE AND FLOW PROTECTION PROJECT

Lead Agency:

California Department of Fish and Game
601 Locust Street
Redding , CA 96001

PROJECT DESCRIPTION AND ALTERNATIVES

The U.S. Bureau of Reclamation (Reclamation) and the California Department of Fish and Game (CDFG) are proposing to remove Saeltzer Dam, eliminate the water diversion to the Townsend Flat Water Ditch (Townsend Ditch) at Saeltzer Dam, and exchange 6,000 acre-feet of water from the Townsend Flat Water Ditch Company's (TFWDC) point of diversion at Saeltzer Dam to Central Valley Project (CVP) facilities and service areas within Shasta County. Removing Saeltzer Dam would benefit threatened and endangered anadromous salmonids by providing unimpeded access to the coldest 10 miles of stream habitat and improving sediment transport through the lower reaches of Clear Creek. This action would compliment other restoration projects in the watershed that benefit anadromous salmonids and other species.

Saeltzer Dam has been identified as a major impediment to fish migration since at least the 1950s when the CDFG installed a fish ladder along the right bank. Since then, the effect of Saeltzer Dam on salmonids has been regularly documented, culminating in the dam's inclusion in CVPIA (b)(12) authorizing language. The DWR identified ten (10) potential alternatives for consideration in a 1986 study. These alternatives included a broad range of options, which, after further consideration, were reduced to the following three alternatives:

1. Replace the existing dam with a low-head diversion dam upstream to convey water to the Townsend Ditch. A new fishway and fish screen would also be constructed at the new dam.

2. Remove the existing dam and construct a new dam at the same location with a fishway through the new dam.

3. Construct a new fishway around the south side of the existing dam.

Costs for these alternatives were considered excessive in comparison to the relative benefits provided. Therefore, these alternatives have not been carried forward because they are not considered feasible, either in terms of economic, institutional, or biological viability. Alternatives 1 and 2 attempted to address delivery of water to TFWDC, but failed to do so in an economical manner. Alternative 3 would maintain water deliveries, but was determined to provide inadequate assurance that fish passage would occur. The proposed project is the only identified project that TFWDC would agree to without reconstructing a ladder on the existing dam. The reconstruction of the ladder at the existing dam was not viewed as a prudent investment of funds because of the poor condition of the dam, the water rights holder's interest in other points of diversion, and the location of the dam at the

head of a gorge causing a compound fish passage problem. Therefore, the only alternative carried forward for full analysis in this EA/IS is the proposed project.

PROJECT LOCATION

The proposed project area (Clear Creek) is the first major tributary to the Sacramento River downstream of Shasta Dam. The creek originates in the mountains between Trinity Reservoir and Shasta Reservoir, and flows in a southeasterly direction for approximately 35 miles to its confluence with the Sacramento River just south of Redding. Whiskeytown Reservoir, located approximately 16 miles upstream from the confluence with the Sacramento River, is the dominant physical structure on the creek, regulating flows in the lower reach of the creek. Saeltzer Dam is located at river mile (RM) 6.2 on lower Clear Creek.

FINDING

It is anticipated that implementing the proposed project would result in the following environmental effects:

- Anadromous salmonids would have access to an additional 10 miles of cool water habitat that is crucial to restoring threatened spring-run chinook salmon and steelhead trout.
- Instream flows would increase to the lower 6 miles of Clear Creek downstream once the current water diversion at Saeltzer Dam is eliminated, improving water temperatures and habitat conditions for anadromous salmonids.
- The existing fish passage impediment would be eliminated.
- Entrainment of juvenile salmonids in Townsend Ditch would be eliminated.
- Injury to adult fish trying to pass the dam would be eliminated.
- Short-term water turbidity and suspended sediment levels would exceed water quality objectives while constructing access roads, stream crossings and cofferdams, and removing the dam and excavating sediments behind the dam.
- Up to approximately 0.02 acres of intermittent pool wetlands, 1.14 acres of riparian wetlands, and 0.78 acres of riverine waters would be temporarily disturbed during construction. However, these impacts would be temporary in nature, and the operation of the proposed project would offset the minor impacts incurred during dam removal.
- Elimination of a dam that has resulted in occasional fatalities and injuries to swimmers.
- Elimination of a structurally unsound facility that has the potential for catastrophic failure that would cause an uncontrolled release of sediments downstream.
- Upon implementation of the water exchange, as TFWDC ceases diversion from Clear Creek, individuals or businesses removing water from the Townsend Ditch without a permit, and users of groundwater dependent on the seepage water from the ditch and its legally irrigated areas would have to purchase water from Centerville Community

Services District or the Anderson-Cottonwood Irrigation District, or would have to drill shallow wells and install home- or commercial-scale water treatment units. However, no water users operating under a permit from the Water Resources Control Board would be adversely impacted.

MEASURES TO AVOID ENVIRONMENTAL EFFECTS

Biological Resources

The project will have a beneficial effect on the Clear Creek anadromous fishery. Irrigated pasture will return to a more natural mesic state. Wildlife resources will not be affected by the project. The following measures have been incorporated into the project:

- Clearly identify elderberry shrub locations in the field to ensure avoidance if project-related activities occur within 100 feet of the shrubs.
- Survey for yellow-breasted chats and yellow warblers if construction activities would result in the loss of potential habitat prior to August 31st. If active nests are present, consult with CDFG and avoid construction activities within the immediate area until August 31st.

Hydrology and Water Quality

Hydrology in the creek will remain unchanged, except that diversions into Townsend Ditch will cease. Groundwater levels may drop as much as 6.5 feet, although actual drops are anticipated to be less. The drop in groundwater will not affect overlying land use. The following measures have been incorporated into the project:

- Equipment would not be operated in the stream channels of flowing live streams except as may be necessary to construct crossings and cofferdams necessary to implement the proposed project. All construction equipment would be cleaned prior to use on site.
- When work in a flowing stream is unavoidable, the entire streamflow would be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier and/or new channel would proceed in a manner that minimizes sediment discharges and facilitates both fish rescue operations and fish escape from the work area.
- Construction sites would be isolated from free-flowing waters of Clear Creek through construction of either cofferdams, sediment berms, or placement of filter fabric and/or native grass straw bales.
- Uncrushed cleaned gravels (½ inch to 5 inch), or other materials acceptable to National Marine Fisheries Service (NMFS) and CDFG, would be used to construct necessary stream crossings. Following construction, these gravels would be notched to provide a passageway and left instream to improve spawning habitat for anadromous salmonids.
- Monitoring of water turbidity and settleable materials would be conducted above and 200 feet downstream of the construction site a minimum of once every 8 hours during the work day. Should water turbidity levels be found to exceed (1) 20 percent of background or 1 Nephelometric Turbidity Unit (NTU) when background turbidity is

between 0 and 50 NTU; (2) 10 NTU when background turbidity is between 50 and 100 NTU; or (3) 10 percent when background turbidity levels are greater than 100 NTU, except during working periods when these limits would be eased to allow for a turbidity increase of 15 NTU and settleable materials exceed 0.1 milliliter per liter (ml/L), construction activities would cease until turbidity and settleable materials decrease to acceptable levels, or other actions as deemed appropriate by Central Valley Regional Water Quality Control Board (CVRWQCB) are implemented.

- An extensive sampling program indicates that mercury contamination does not reach hazardous levels. However, to ensure that mercury contamination does not result in significant impacts, monitoring and sampling efforts will continue throughout dam removal and dewatering of the reservoir pool, and disposition of the excavated sediment dewatering effluent will be consistent with applicable and relevant requirements.
- The release of fine sediment from the excavated reservoir pool to the stream will be controlled in a manner that attains the Basin Plan Objectives for avoiding detrimental sediment deposition in the stream. The control will be achieved via full excavation of the deepest sediment deposits in the vicinity of the dam, design, placement of a large pilot channel to guide the stream through the upper reservoir sediment deposits, placement of the gravel stability berm below the dam to impound residual sediment until a winter flow event occurs, and use of a flushing flow from Whiskeytown Reservoir in conjunction with the winter flow event during the release. Sediment monitoring will occur during the wintertime release.
- Complete revegetation and stabilization of disturbed soils. Seeding and mulching of disturbed areas with native grass species would be conducted prior to November 15 or immediately following completion of construction activities, using native species appropriate for this purpose.
- Sediment catchment basins or traps would be used to prevent sediment from being transported to sensitive aquatic habitats. The location and size of these basins would be designed to minimize impacts to riparian areas, wetland habitats, and stream channels. The types of sediment traps considered include filter berms and straw-bale barriers.

Utilities

The project will not affect utilities in the area. However, future deliveries of exchange water will be subject to separate environmental review. No measures are needed to avoid environmental effects.

Hazardous Materials

Hazardous materials used during dam removal are similar to other materials associated with standard construction practices. The following measures have been incorporated into the project:

- Implement construction Best Management Practices (BMPs) and develop Spill Prevention Control and Countermeasures (SPCC).
- Identify staging areas for fueling and maintaining heavy equipment.

- If oil or fuel spill occurs during construction or maintenance activities, immediately cease work, contact the CVRWQCB and CDFG if spill is above state and/or federal reporting requirements, and begin cleanup.

Geology and Soils

The project will not affect geology or soils in the area. No measures are needed to avoid environmental effects.

Mineral Resources

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Air Quality

Air quality effects during construction are similar to those at typical construction sites of similar magnitude. The following measures have been incorporated into the project:

- When using internal combustion engines, turn off when not in use.
- Properly maintain equipment.
- Incorporate dust-suppression techniques: water unpaved access roads and construction staging areas at least twice a day during construction periods.

Land Use and Policies

No measures are needed to avoid environmental effects. Some changes may occur as a result of the project; however, current land use would likely continue following implementation of the project. In some cases, landowners may not opt to replace existing free water from the ditch with other sources; however, sources exist and are currently in use in other locations throughout the county.

Aesthetics

No measures are needed to avoid environmental effects to viewsheds. The appearance of portions of the landscape would change as the TFWDC ceases to divert water into the Townsend Ditch, but the rural character of the currently irrigated lands would not change. The fields would simply shift from an irrigated status to the unirrigated status typical of the foothills. Similarly, the water levels in the gravel pit ponds fed by leakage, seepage, and pasture runoff would drop, but the industrial quality of the landscape in this gravel mining area would remain unchanged.

Cultural Resources

No cultural resources were identified during site and database reviews of this project. However, the following measure has been incorporated into project design to ensure that no impacts occur:

- If ground-disturbing activities uncover prehistoric or archaeological resources, these activities would cease immediately, and Jim West, the Regional Archaeologist for the

U.S. Bureau of Reclamation Mid-Pacific Region, would be contacted. Activities would not resume until appropriate measures have been developed.

Noise

Noise during dam removal will be similar to other construction projects of similar nature. No sensitive noise receptors exist near the site, and temporary construction noise would not be significant. No measures are needed to avoid environmental effects.

Recreation

No measures are needed to avoid environmental effects to public recreation. A private, recreation-based business will be economically affected by declining water levels following cessation of diversion by the TFWDC, as it might be forced to relocate temporarily or cancel scheduled events in the short term, purchase water, and seal the gravel berms that enclose its pond in the long term.

Based on the above, and as further detailed in the attached Environmental Assessment/ Initial Study, CDFG has determined that the proposed project <u>will not</u> have any significant adverse environmental effects.

MITIGATION

Because no significant impacts resulting from the project have been identified, no mitigation is required. The project has been designed in close coordination with resource agencies in order to avoid potential impacts to the environment. Economic impacts may result from TFWDC's decision to relocate its water right through exchange with Reclamation, as some users must purchase water and associated transport, treatment, and storage facilities to replace the supplies of free water for which they lack permits from the State Water Resources Control Board. However, provision was made in the agreement between TFWDC, Reclamation, and CDFG for TFWDC to address any legal claims based on injury to water rights resulting from dewatering of the Townsend Ditch.

DETERMINATION

On the basis of this evaluation:

a. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish and wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare and endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b. The project will not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.

c. The project will not have effects that are individually limited, but cumulatively considerable.

d. No substantial evidence exists that the project will have a negative effect on the environment.

AGENCY COORDINATION

The following agencies have been involved in the coordination process or have provided input:

- Bureau of Land Management
- California Department of Fish and Game
- Central Valley Regional Water Quality Control Board
- National Marine Fisheries Service
- Natural Resources Conservation Service
- U.S. Fish and Wildlife Service
- Western Shasta Resource Conservation District

This Negative Declaration is filed pursuant to the California Environmental Quality Act Guidelines. Comments may be submitted to CDFG at the address identified above.

for Mark Stopher
Don Koch, Regional Manager
California Department of Fish and Game

10/7/00
Date

Contents

SECTION 1

Introduction

1.1 Purpose of the Final EA/IS

This Final Environmental Assessment/Initial Study (EA/IS) has been prepared by the U.S. Bureau of Reclamation (Reclamation) and California Department of Fish and Game (CDFG) pursuant to the requirements of the National Environmental Policy Act (NEPA), as amended, and California Environmental Quality Act (CEQA) of 1970.

Per NEPA and CEQA, the agencies provided regulatory agencies and the general public with opportunities to comment on the Public Draft EA/IS. The agencies circulated the EA/IS for a 30-day public review period between June 12, 2000 and July 13, 2000. Comments received through July 13, 2000 are addressed in this Final EA/IS. If the agencies do not certify the Final EA/IS, they may choose to conduct further studies on the Proposed Project or alternatives to the Proposed Project.

This volume includes changes to the EA/IS for the Saeltzer Dam Fish Passage and Flow Protection Project. The volume includes the following:

- A detailed list of changes, including additions, deletions, and corrections, made to the Public Draft EA/IS based on comments received.
- Final EA/IS, including comments received from agencies and the public on the Public Draft EA/IS and responses to those comments.

Additionally, the following appendices have been added to the document and are included as part of the Final EA/IS:

- Appendix A — USFWS Species List for Lower Clear Lake Watershed, June 21, 2000
- Appendix B — Archaeological Investigations for the Saeltzer Dam Project
- Appendix C — Most Current Agreement between U.S. Bureau of Reclamation, California Department of Fish and Game, and Townsend Flat Water Ditch Company
- Appendix D — Amended Figure 3-6
- Appendix E — Summary of Project History and Public Involvement
- Appendix F — Office of Historic Preservation Determination of Effect for the Removal of Saeltzer Dam

SECTION 2

Changes to the Public Draft EA/IS

2.1 Introduction

This section of the Final EA/IS includes additions, deletions, and corrections to the Public Draft EA/IS. These changes were made in response to the comments received. The comments and corresponding responses are included in this Final EA/IS.

The changes to the Public Draft EA/IS are presented for each section and appendix of that document. Several sections and appendices did not change. Changes to text are indicated by chapter, section, page number, paragraph number, and line number.

To aid the reader in following the changes presented, this section of the Final EA/IS should be reviewed in conjunction with the Public Draft EA/IS.

2.2 Changes to Public Draft EA/IS

Table 2-1 details changes to the Public Draft EA/IS.

TABLE 2-1
Changes to the Draft EA/IS
Saeltzer Dam Fish Passage and Flow Protection Project

Chapter	Section	Page	Paragraph	Line	Comment
Introduction					
1	1.3.2	1-7	3	1	**Replace** "to divert" **with** "of an unadjudicated amount, asserted to be"
1	1.3.2	1-7	3	4	**Add the following immediately after sentence 2:** "However, the TFWDC, as the holder of the pre-1914 water right, has the ability to change its point of diversion or terminate diversion at will, and has elected to exchange its water right for 6,000 acre-feet of CVP water and a cash sum."
1	1.3.2	1-7	3	7	**Delete** "substitute"
1	1.3.2	1-7	3	13	**Replace** "substitute" **with** "exchange"
1	1.3.2	1-7	3	14	**Replace** "substitute" **with** "exchange"
1	1.3.2	1-7	3	15	**Replace** "substitute" **with** "exchange"
1	1.3.2	1-7	3	20	**Replace** "substitute" **with** "exchange" **Add** the word "probably" before "would use" in line 20.
1	1.3.2	1-7	3	20	**Add the following immediately before "would use":** "probably"
1	1.3.2	1-8	1	3	**Replace** "coordinate CVP facilities to comply" **with** "enter into Section 7 consultation to schedule bringing the facilities into compliance with"
1	1.3.2	1-8	1	4&5	**Replace** "in the near future by virtue of CVPIA screen programs" **with** "if the diversions are not already in compliance. Reclamation has also agreed to assume any risks associated with removing the dam and sediments, and the TFWDC has agreed to mitigate, as required, any effects of drying of the Townsend Ditch"
1	1.3.3	1-8	2	Last	**Add the following after the last sentence:** "These agreements would formalize past commitments concerning flows, but neither ensure nor preclude any further flow increments."
1	1.3.3	1-8	3	2	**Replace** "informal" **with** "unsigned"
1	1.4.1	1-9	2	Last	**Delete** "likely"
1	1.5	1-11	New	NA	**Add the following immediately after Hydrology and Water Quality:** "To avoid or minimize potential impacts related to increased turbidity, the project would ensure that turbidity increases do not exceed the following levels: (1) where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), turbidity shall not exceed 1 NTU; (2) when background turbidity is between 0 and 50 NTU, turbidity levels shall not exceed 20 percent of background; (3)

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					when background turbidity is between 50 and 100 NTUs, turbidity shall not exceed 10 NTUs; and (4) when background turbidity levels are greater than 100 NTUs, turbidity shall not exceed 10 percent. The project would ensure that settleable matter would not exceed 0.1 milliliter per liter(ml/L) in surface waters as measured 200 feet downstream of the construction site. Water quality would be monitored by conducting grab samples, immediately upstream and 200 feet downstream of the work site, a minimum of every 4 hours during construction. In determining compliance with the above limits, appropriate averaging periods may be applied, provided that beneficial uses would be fully protected. Should water turbidity or settleable matter levels exceed Sacramento River Basin Plan standards, the CVRWQCB would be notified immediately, and construction activities would cease until standards are restored or other actions to alleviate turbidity and/or settleable materials are taken as agreed to by the contractor and CVRWQCB. A summary of the sampling results would be available two weeks after construction is completed."
Alternatives					
2	2.1	2-1	1	9	**Add the following to the end of the last sentence:** "and expand the riparian zone along the creek."
2	2.1	2-1	2	4	**Delete** "substitute"
2	2.1	2-1	2	7	**Delete** "substitute"
2	2.1	2-1	2	8	**Delete** "substitute"
2	2.1	2-1	2	9	**Replace** "If the McConnell" **with** "If either the McConnell Foundation or CCSD"
2	2.1	2-1	4	10	**Add the following text immediately after the word "agreement":** ", through Section 7 consultations,"
2	2.2	2-2	2	8	**Add the following after the last sentence:** "Continued use of the Townsend Ditch, however, would not be assured because a fish screen would eventually be required, potentially leading to abandonment of the ditch for economic reasons."
2	2.2	2-2	4	7	**Add the following text before "mercury deposits":** "sediments and any"
2	2.3	2-3	6	1	**Delete** "each of"

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2	2.3	2-3	6	4	**Delete** "and diversions would continue"
Affected Environment and Environmental Consequences					
3	3.1	3-1	1	4&5	**Delete** "An updated species list has been requested from the USFWS and will be incorporated in the Final EA."
3	3.1.2.2	3-11	5	6	**Add the following to the end of the last sentence:** ", and local residents report taking water from the Townsend Ditch for irrigation of unspecified acreages"
3	3.1.2.2	3-11	6	5	**Replace** "irrigation of pastures" **with** "irrigation of the pastures irrigated under the TFWDC water right"
3	3.1.2.2	3-12	1	1	**Add the following text as a new last sentence following "occur":** "Lands currently irrigated without a permit from the Water Resources Control Board would revert to unirrigated pastures and orchards unless the owners find alternative supplies"
3	3.1.2.2	3-12	2	6	**Delete both uses of** "bypass"
3	3.1.4.2	3-16	2	4	**Add the following text immediately after "creek":** "offsetting changes along the ditch"
3	3.2.1.1	3-19	1	5	**Add the following sentence immediately after "Powerhouse":** "Diversions for the CCSD and the Clear Creek Community Services District occur at Whiskeytown Dam and are conveyed through the Muletown Conduit, which parallels Clear Creek until it begins to flow eastward (Figure 1-1)"
3	3.2.1.1	3-19	1	13	**Add the following after the last sentence:** "All controlled releases to Clear Creek occur through the City of Redding's powerplant"
3	3.2.1.2	3-20	6	Bullet 1	**Replace the first bullet under Criteria for Determining Significance with the following:** "Increase in water turbidity in surface waters that exceeds: (1)1 Nephelometric Turbidity Unit (NTU) when natural turbidity is between 0 and 5 NTU; (2) 20 percent of background or NTU when background turbidity is between 0 and 50 NTU; (3) 10 NTU when background turbidity is between 50 and 100 NTU; and/or (4) 10 percent when background turbidity levels are greater than 100 NTU, except during working periods when these limits would be eased to allow for a turbidity increase of 15 NTU over background turbidity levels as measured 200 feet downstream of the construction site"
3	3.2.1.2	3-21	New	NA	**Add the following text immediately above 3.2.1.3 Mitigation:** "To avoid or minimize potential impacts related to increased turbidity, the project would ensure that turbidity increases do not exceed the following levels: (1) where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), turbidity shall not exceed 1 NTU; (2) when background turbidity is between 0 and 50 NTU, turbidity levels shall not exceed 20 percent of background; (3) when background turbidity is

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					between 50 and 100 NTUs, turbidity shall not exceed 10 NTUs; and (4) when background turbidity levels are greater than 100 NTUs, turbidity shall not exceed 10 percent. The project would ensure that settleable matter would not exceed 0.1 milliliter per liter(ml/L) in surface waters as measured 200 feet downstream of the construction site. Water quality would be monitored by conducting grab samples, immediately upstream and 200 feet downstream of the work site, a minimum of every 4 hours during construction. In determining compliance with the above limits, appropriate averaging periods may be applied, provided that beneficial uses would be fully protected. Should water turbidity or settleable matter levels exceed Sacramento River Basin Plan standards, the CVRWQCB would be notified immediately, and construction activities would cease until standards are restored or other actions to alleviate turbidity and/or settleable materials are taken as agreed to by the contractor and CVRWQCB. A summary of the sampling results would be available two weeks after construction is completed."
3	3.2.2	3-22	1	6	**Delete** "an"
3	3.2.3.1	3-25	1	3	**Add the following text immediately after "HILL"):** "The Steiner pond, for example, is reported to drop at least 5 to 6 feet when the ditch is dry, while adjacent ponds on the Shea property are reported to decline little"
3	3.2.3.1	3-25	5	9	**Replace** "Potential supplies include new wells, increased retention of winter water, or annexation to ACID for supplemental water deliveries" **with** "Potential supplies include prevailing practices such as wells couple with domestic water treatment units, increased retention of winter water by means of ponds and cisterns, use of bottled water, and annexation to the CCSD or ACID for supplemental water deliveries"
3	3.3.1.1	3-26	4	5	**Add the following text after the last sentence:** "Most of the service connections are either domestic or rural residential, which has resulted in treated, potable water being applied as irrigation water at rural residences."
			6	4	**Add the following text after the last sentence:** "Most of the service connections are either domestic or rural residential, which has resulted in treated, potable water being applied as irrigation water at rural residences."
3	3.3.1.1	3-28	New (1)	NA	**The following text did not appear in the public draft of the EA/IS and should appear at the top of page 3-28:** "As noted in the project description, the TFWDC is a private water system that diverts supplies from Clear Creek at Saeltzer Dam. The ditch flows generally east and north, supplying irrigation water for pastures along its length."

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Chapter	Section	Page	Paragraph	Line	Comment
3	3.3.1.2	3-28	New	NA	**The following text did not appear in the public draft of the EA/IS and should follow Section 3.3.1.1:** "3.3.1.2 Electricity. A majority of the project area is served by the City of Redding's electrical power distribution system. Pacific Gas and Electric (PG&E) serves portions of the service area outside of the City's service area. Whiskeytown Reservoir delivers water to both Spring Creek and Clear Creek. Water released to Clear Creek from Whiskeytown Reservoir passes through the Whiskeytown Powerplant owned by the City of Redding. The powerplant has one unit and a capacity of"
3	3.3.2.1	3-29	New	NA	**Add the following text as a new paragraph immediately after the first paragraph:** "Seven households and several businesses would be affected by the drying of the ditch. Some of these divert water from the ditch without permits from the State Water Resources Control Board, and others benefit from seepage and leakage water. These households would incur costs of water acquisition similar to those of other western Shasta County residents since the water now taken at no cost from the Townsend Ditch would have to be replaced by water purchased from a water rights holder; pumped, treated, and stored; or captured in cisterns during the winter for summer use. The pastures and orchards/fuel wood plantations that these unpermitted users currently irrigate with water taken from the Townsend Ditch or its seepage, would probably revert to unirrigated status because the most probable source of water for the individual households is the CCSD, which distributes potable water and is relatively expensive for agricultural use. The gravel miners would generally benefit from lowered water tables as long as some water remains, but they are located such that replacement water should be available at economic rates from the ACID."
3	3.3.2.1	3-29	2	2	**Add the following text immediately after "water quality."**: "Additional flows, up to 200 cfs, may be implemented under other programs but are not part of this project."
3	3.3.2.1	3-29	2	5	**Add the following text immediately after "unchanged":** "or increase"
3	3.3.2.1	3-29	2	5	**Replace** "Any exchange water that would be moved through the Spring Creek Powerplant would result in additional generation, providing an incremental benefit in terms of power generation in the region." **with** "Power generated by the City of Redding would remain the same or increase, depending on future decisions concerning fishery flows."
3	3.4.1	3-30	2	13	**Add the following text after the last sentence:** "Recently, two samples were recorded with mercury levels above the eco benchmarks; however, no samples were recorded with mercury levels above the TTLC or STLC limits. Sampling would continue throughout the project."

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3	3.8.1.1	3-38	5	3	**The following text did not appear in the public draft of the EA/IS and should begin immediately after line 2 of Section 3.8.1.1:** "adjacent to the dam are owned by CDFG, and are designated as Rural Residential (RA) in the Shasta County General Plan. CDFG is in the process of transferring ownership of this property to BLM. Multiple organizations involved in the lower Clear Creek watershed, including BLM and the Lower Clear Creek Coordinated Resource and Management Planning Group (CRMP), envision improving public access and public safety in the project vicinity and developing a regional trails connection, picnic areas, and interpretive monuments adjacent to the project area (WSRCD, 1998)**.** A long-term land management goal of the Clear Creek CRMP is to develop a regional trails corridor along the entire length of lower Clear Creek that will eventually provide a non-motorized vehicle connection between the Sacramento River and Whiskeytown National Recreation Area. In addition, Horsetown-Clear Creek Preserve (HCCP) acquired approximately 27 acres several miles upstream of Saeltzer Dam in 1992, and entered into an agreement with BLM to manage an additional 400 acres in this vicinity in 1994. The portion of lower Clear Creek between Saeltzer Dam and the Sacramento River is located within Shasta County and City of Redding limits**.** The Shasta County General Plan land use designation for this portion of the creek is "Significant Creekside Corridor." The City of "
3	3.8.2.1	3-41	New	NA	**Add the following text as a new paragraph immediately after the last bullet:** "Individual parcels and businesses would be economically impacted by need to purchase water they currently take without permits from the Townsend Ditch or obtain from seepage and leakage from the ditch. One business, the water ski school, might be forced to relocate temporarily or cancel scheduled events in the short term, purchase water, and seal the gravel berms that enclose the pond in the long term. However, the classes of land uses represented would not be precluded, the critical (public health) water supplies can be replaced, and the costs incurred for domestic, industrial, and agricultural uses should be well within the range experienced by other residents of western Shasta County. Thus, no land use impacts need occur. All impacts would be economic, and impacts related to shifts from irrigated to non-irrigated agriculture, for example, would be economic decisions, not physically mandated changes. (The alternative irrigation water supplies for the agricultural users in the upper reaches of the ditch would either be treated water available from the Centerville CSD or well water that the landowners would have to treat if it were otherwise unuseable. Either supply would be relatively expensive for agricultural use. However, it is anticipated that groundwater supplies are suitable for agricultural use.)
3	3.8.2.1	3-41	5	1	**Replace** "precluded" **with** "affected"
3	3.8.2.1	3-41	6	2	**Add the following text immediately after "project area":** "using permitted sources of water"

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3	3.8.3	3-42	1	1	**Add the following text immediately before "impacts":** "environmental"
3	3.8.3	3-42	1	New (2)	**Add the following after the last sentence:** "(Economic impacts are expected for those individual who use the artificially high summer water table or divert water without a Water Board Permit because they would have to shift from a free water supply to alternatives at the prevailing local rates.)"
3	3.9.1	3-42	3	1	**Add the following text immediately after "feature":** "from publicly accessible areas"
3	3.9.1	3-42	3	2	**Add the following text as a new sentence immediately following "Road.":** "Lands currently irrigated by the ditch would remain rural and wild although they would revert to their pre-irrigation character. Lands that are now green in the summer would become gold as is the norm for the unforested foothills. However, the aesthetic value would remain unchanged."
3	3.12.2.1	3-55	Bullet 1	1	**Add the following text immediately before "recreational":** "public"
3	3.12.2.1	3-55	4	2	**Add the following text immediately before "recreational":** "public"
3	3.12.2.1	3-55	5	1	**Add the following text immediately before "recreation":** "public"
3	3.12.2.1	3-55	5	5	**Add the following text at the end of the paragraph immediately after "project.":** "Dislocation of the private water ski school, its scheduled competitions, and its ancillary use as a bass fishing pond would be impacted for the latter part of 2000, and possibly longer. However, water can be obtained by means of a diversion from the ACID canal, the gravel berms that form the edges of the pond can be made more water tight, and further excavation of the pond as the water levels drop could create a pond that is more prone to gain water from the regional water table, rather than lose water to it. Thus, the public recreational potential would increase, although the private recreational potential would be lessened pending its relocation to other water areas, such as Shasta Lake, or implementation of actions to replace the water supply for the water ski pond and to make it less leaky."
Other Impact and Commitments					
4	4.1.1	4-2	Item No. 1	9	**Add the following text at the end of the paragraph:** "*Additional flows may occur as part of the Anadromous Fish Restoration Program, but the amounts are unlikely to be formalized without further study as required by the CVPIA*."
4	4.1.1	4-2	Item No. 5	2	**Replace** "WSRCD's" **with** "the Reclamation's"

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4	4.1.1	4-2	Item No. 6	3	**Replace** "(upstream of Whiskeytown Reservoir) **with** ("downstream and upstream of Whiskeytown Reservoir, respectively)"
4	4.1.2	4-2	Last	2	**Delete** "of up to 55 cfs of the natural flow"
4	4.1.2	4-2	Last	6	**Delete** "substitute"
4	4.1.2	4-3	1	4	**Replace** "substitute" **with** "exchange"
4	4.1.2	4-3	2	4	**Replace** "Tunnel" **with** "Conduit, Figure 1-1"
4	4.2	4-3	3	3	**Replace** "55 cfs" **with** "pre-1914"
4	4.2	4-3	3	4	**Replace** "As such, CCSD" **with** "If that right were the 55 cfs claimed by the TFWDC, CCSD would have"
4	4.2	4-3	3	10	**Replace** "Tunnel" **with** "Conduit"
4	4.3	4-4	2	9	**Replace** "affect" **with** "preclude continuation of"
4	4.3	4-4	2	10	A**dd the following text immediately after "vicinity.":** "The removal of the dam and the water exchange would not disproportionately impact minority or low-income populations, and the economic impacts of the drying of the ditch would fall equally on both fixed income retirees and owner of commercial enterprises."
4	4.3	4-4	2	11	**Add the following text at the end of the paragraph:** "Moreover, the economic costs that the residences currently benefiting from water taken from the ditch are expected to be commensurate with those experienced by virtually all other residents of western Shasta County."
4	4.4	4-4	1		**Add the following text as a new section:** 4.4 Indian Trust Assets No Indian Trust Assets would be affected by the project. The Redding Rancheria is located to the south of Clear Creek, and thus would not be affected by removal of the dam or drying of the ditch.
References					**No changes have been made to Chapter 5 of the Draft EA/IS**
List of Preparers and Participants					**No changes have been made to Chapter 6 of the Draft EA/IS**

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Distribution List					**No changes have been made to Chapter 7 of the Draft EA/IS**
Appendices					**No changes have been made to the appendices of the Draft EA/IS**